

ABSTRACT OF DISCLOSURE

Repeater cells each comprising a buffer or an inverter and an n+ diffusion layer-P well type protection diode or a p+ diffusion layer-N well type antenna protection diode connected to an input pin of the buffer or the inverter for preventing antenna damage or an antenna rule error from occurring are previously registered by registration means 511 as the cells to be registered in a cell library 505. Whether or not a wiring conductor conducting to a gate electrode becomes an antenna ratio exceeding an allowed antenna ratio in the semiconductor device is determined by determination means 514 and if the wiring conductor exceeds the allowable antenna ratio, one or more repeater cells are inserted into any point of the wiring conductor by selection means 515.